

4. (AMENDED) The projection television of claim 1 wherein said image projectors [(14, 16, 18)] comprise exit pupils at least substantially lacking magnification and focusing properties.

5. (AMENDED) The projection television of claim 1 wherein said holographic reflector [(20)] has panchromatic optical properties.

6. (AMENDED) The projection television of claim 1 wherein said holographic reflector [(20)] has optical properties of a concave mirror.

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7. (AMENDED) The projection television of claim 1 wherein said holographic reflector [(20)] has optical properties of a spherical lens system.

8. (AMENDED) The projection television of claim 1 wherein said holographic reflector [(20)] has optical properties of a parabolic lens system.

9. (AMENDED) The projection television of claim 1 wherein:
said screen [(22)] has a color shift less than or equal to approximately 2 for all said angles of incidence in a first subrange of angles of incidence greater than 0° and less than or equal to approximately 10°; and,
the color shift of said screen [(22)] is less than or equal to approximately 5 for all said angles of incidence in a second subrange of angles of incidence greater than approximately 10° and less than or equal to approximately 30°.

10. (AMENDED) The projection television of claim 1 in which said three-dimensional hologram [(26)] has the following performance specifications:

Horizontal half viewing angle: $38^\circ \pm 3^\circ$

Vertical half viewing angle: $10^\circ \pm 1^\circ$

Screen gain: ≥ 8

Color shift: ≤ 3 .

Sub 33 11. (AMENDED) A projection television comprising:
an optical system comprising at least three image projectors [(14, 16, 18)] for projecting respective images of different colors onto a projection screen [(22)], and a holographic reflector [(20)] disposed in optical communication with said image projector and said screen so that one [(16)] of said projectors has a first optical path in a substantially orthogonal orientation with said screen and at least two [(14, 18)] of said projectors having respective optical paths converging toward

said first optical part a non orthogonal orientation defining angles of incidence, said holographic reflector comprising preselected wavelength dependent light reflecting characteristics suitable for preconditioning said images so as to compensate for chromatic aberrations induced in said images by said projection screen [(22)]; and

said projection screen [(22)] formed by a three dimensional hologram [(26)] representing a three dimensional array of lenticular elements disposed on a substrate [(24)], said screen receiving images from said projectors [(14, 16, 18)] on a first side and displaying said images on a second side with controlled light dispersion of all said displayed images.

12. (AMENDED) The projection television of claim 11 wherein said at least three projectors [(14, 16, 18)] each include a lens [(15, 17, 19)] adapted to focus said respective images.

SUB 4 13. (AMENDED) The projection television of claim 12 wherein said lenses [(15, 17, 19)] comprise a polymer material.

14. (AMENDED) The projection television of claim 11 wherein said image projectors [(14, 16, 18)] comprise exit pupils at least substantially lacking magnification and focusing properties

15. (AMENDED) The projection television of claim 11 wherein said holographic reflector [(20)] has panchromatic optical properties.

16. (AMENDED) The projection television of claim 11 wherein said holographic reflector [(20)] has optical properties of a concave mirror.

17. (AMENDED) The projection television of claim 11 wherein said holographic reflector [(20)] has optical properties of a spherical lens system.

18. (AMENDED) The projection television of claim 11 wherein said holographic reflector [(20)] has optical properties of a parabolic lens system.

19. (AMENDED) The projection television of claim 11 wherein:
said screen [(22)] has a color shift less than or equal to approximately 2 for all said angles of incidence in a first subrange of angles of incidence greater than 0° and less than or equal to approximately 10°; and